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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 29

Application Number: 08/915,683

Filing Date: August 21, 1997

Appellant(s): Fujita et al.

GROUP 1100

JAN 25 1998

MAILED

Scott M. Daniels
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed December 7, 1998.

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(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying there are no related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

No amendment after final has been filed.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

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(7) *Grouping of Claims*

The appellant's statement in the brief that certain claims do not stand or fall together is not agreed with because Appellants provide no substantive arguments as to why the claims do not stand or fall together. For example, Appellants state that claims 5-8 are separately patentable merely because "Appellant has convincingly demonstrated that independent claim 1 is nonobvious". There are no arguments actually relating to any one of claims 5-8. Appellants state that claim 9 is separately patentable, but, again, do not present any arguments relating specifically to claim 9. They have merely restated the various limitation of claim 9 but not any reasons why the rejection does not apply specifically to claim 9. See MPEP 1206 section (7) Grouping of Claims.

(8) *Claims Appealed*

A substantially correct copy of appealed claims 1 and 5-9 appear on pages 15-18 of the Appendix to the appellant's brief. The minor errors are as follows:

Claim 1 lines 4-5 delete "wherein said tabular silver halide grains as calculated in terms of area". [This is an obvious word processing error.]

Claim 5 line 1: replace "directed" with --direct--. [This is a simple misspelling]

Claim 7 line 1: delete "type". [This word has been deleted by amendment.]

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Claim 7 line 5: delete "jam" and replace with μm . [This is a word processing error.]

Claim 8 line 1: delete "type". [This word has been deleted by amendment.]

Claim 9 line 9: replace "ration" with --ratio--. [This is a simple misspelling]

Claim 9 line 12: insert --average-- before "grain". [The word "average" appears in the original claim.]

Claim 9 structure (B) should read $\text{R-SO}_2\text{-S-R}^1$

Claim 9 line 7 on page 18: Replace "R", R2" with $\text{--R}^1, \text{R}^2\text{--}$

Claim 9 structure (I) should read $(\text{DYE-Y})_n\text{-Z}$ [The subscript n was omitted].

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

4,504,570	Evans et al.	3-1985
5,081,009	Tanemura et al.	1-1992
5,110,719	Shuto et al.	5-1992

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(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 and 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (US 4,504,570) in view of either Tanemura et al. (US 5,081,009) or Shuto et al. (US 5,110,719).

Evans et al. (US 4,504,570) teach core/shell tabular grains which may be used in direct positive internal latent image systems. Emulsion B contains grains which have a crystal morphology as presently claimed. The "a" and "b" values claimed in the instant application are comparable to those values obtained from the emulsions of Evans et al. (US 4,504,570). However, the primary reference does not teach the sulfur sensitizer as presently claimed.

Either Tanemura et al. (US 5,081,009) or Shuto et al. (US 5,110,719) disclose sulfur sensitizers that have the presently claimed structures (A), (B) or (C). These sensitizers are specifically claimed to be useful for core/shell internal latent image silver halide grains. These compounds are disclosed to provide high sensitivity, low D_{\min} and high D_{\max} in silver halide emulsions. See especially Tanemura et al. (US 5,081,009) 2:62-3:5 and the claims; Shuto et al. (US 5,110,719) 2:5-9 and the claims.

It would have been obvious to incorporate the sulfur sensitizers of either Tanemura et al. (US 5,081,009) or Shuto et al. (US 5,110,719) in the grains of Evans et al. (US 4,504,570), since the secondary references specifically teach the use of the sulfur

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sensitizers in the type of grains taught Evans et al. (US 4,504,570) with the reasonable expectation of achieving core/shell tabular grain emulsion which will have an increased sensitivity and D_{\max} and a decreased D_{\min} .

(11) Response to Argument

Appellants have argued declaration evidence submitted under 37 C.F.R. 1.132 show unexpected results. The Examiner repeats his objections to the declaration evidence below.

Appellants have submitted a declaration under 37 C.F.R. 1.132 on October 22, 1997 as further evidence for unexpected results. This declaration adds an additional sample to the declaration filed May 22, 1997 in the parent application 08/474,715. (Note: the headings given in the table at the bottom of page 2 of the declaration filed September 23, 1997 are incorrect. The second and third occurrences of "Maximum Density" were interpreted as --Minimum Density-- and --Middle Sensitivity--, respectively, in accordance to Table 4' on page 3 of the declaration filed May 22, 1997.) The combined results from the two declarations show an increase in maximum density, a decrease in minimum density and improved sensitivity when the inventive sulfur sensitizers are used. However, the Examiner believes that these results are the expected results when the sulfur compounds as taught by either Tanemura et al. (US 5,081,009) or Shuto et al. (US 5,110,719) are used. These references clearly teach an increase in maximum density, decrease in minimum density and improved sensitivity when the claimed sulfur compounds are used during sensitization.

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The declaration under 37 CFR 1.132 filed March 4, 1998 is insufficient to overcome the rejection of claims 1 and 5-9 based upon the cited prior art because Appellants' claimed addition of compounds (A), (B) or (C) is the preferred embodiment in the secondary references. Tanemura et al. (US 5,081,009) at 11:66-12:2 clearly teach that the compounds are preferably added during formation of the core grains and also teach at 5:4-5 that exclusive use of silver bromide is the most preferred and that tabular grains may be used (5:64-68). Shuto et al. (US 5,110,719) provide similar teachings at 7:42-44, 10:52-54 and 10:58-63. Since the references clearly teach the combination as preferable then it would have been expected to gain an improvement in photographic characteristics. This is precisely what Appellants' declaration shows, i.e., the claimed compounds improve the photographic characteristics.

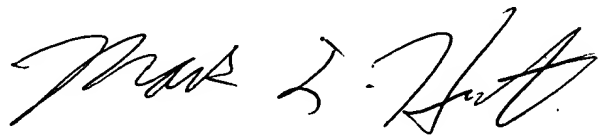
Appellants have argued that the Examiner has use improper hindsight in making the above rejection. The Examiner disagrees. The reference to Evans clearly teaches tabular core/shell grains that are sulfur sensitized. The secondary references teach well known sulfur sensitizers. It would have been obvious to use well known sulfur sensitizers, such as taught in the secondary references, to sensitize the grains of Evans because Evans specifically teaches sulfur sensitization. This would lead to a reasonable expectation of achieving tabular core/shell grains as taught by Evans that are appropriately sulfur sensitized; this is Appellants' invention. Since this logic does not require any reference to Appellants' specification, then there can be no improper hindsight.

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Appellants have argued at the bottom of page 10 of their Brief, that the references “cannot possibly teach or suggest that a different thiosulfonic compound-containing emulsion, as currently claimed, has improved photographic characteristics.” The Examiner is asserting that the references do suggest improved photographic characteristics. The compounds taught in the references do not have a “structural similarity” to those presently claimed, as stated in the paragraph bridging pages 11 and 12 of the Brief. The compounds taught in the references are, in fact, identical to those in the appealed claims. These compounds are disclosed in the secondary references to provide high sensitivity, low D_{\min} and high D_{\max} in silver halide emulsions. Thus, there are explicit teachings that the thiosulfonic compounds do indeed provide improved photographic characteristics.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



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mfh
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